

Claims

- [c1] 1.A system for controlling a medical device through voice commands, comprising:
a medical device for performing at least one of interventional and diagnostic procedures;
an input unit for receiving a voice command identifying a function associated with one of a diagnostic and interventional procedure; and
a control module for directing a medical device to perform the function based on said voice command.
- [c2] 2.The system of claim 1 wherein said input unit is a microphone.
- [c3] 3.The system of claim 1 further including a voice decoder for decoding said voice command into a basic signal.
- [c4] 4.The system of claim 3 further including a protocol translator for converting said basic signal into a signal code representing the function identified by said voice command.
- [c5] 5.The system of claim 4 wherein said control module includes a processing unit for directing said medical device to perform said function designated by said signal code.
- [c6] 6.The system of claim 4 further including a transmitter for transmitting said signal code to said control module.
- [c7] 7.The system of claim 1 wherein said medical device is an interventional medical device.
- [c8] 8.A system for controlling a medical device through voice commands, comprising:
a medical device for performing one of a medical diagnostic and interventional procedure;
a microphone for receiving a voice command identifying a function associated with one of said medical diagnostic and interventional procedure;
a voice decoder for decoding said voice command into a basic signal; and

a protocol translator for converting said basic signal into a signal code representing said function identified by said voice command; and
a processing unit for directing said medical device to perform said function designated by said signal code.

- [c9] 9.The system of claim 8 wherein said medical device is an interventional medical device.
- [c10] 10.The system of claim 8 wherein said signal code is an infrared (IR) signal code.
- [c11] 11.The system of claim 8 wherein said signal code is a radio frequency (RF) signal code.
- [c12] 12.The system of claim 8 wherein said medical device is a magnetic resonance imaging (MRI) device.
- [c13] 13.The system of claim 8 wherein said medical device is a computerized tomography imaging device.
- [c14] 14.The system of claim 8 wherein said medical device is a fluoroscopic imaging device.
- [c15] 15.The system of claim 8 further including:
a transmitter associated with said microphone, wherein said transmitter transmits said signal code, and
a receiver provided at said medical device for receiving said signal code, wherein said medical device and said microphone are remotely located from one another.
- [c16] 16.The system of claim 15 further including a remote control, wherein said remote control includes a remote control receiver for receiving said signal code transmitted from said transmitter, and wherein said remote control transfers said signal code to said receiver provided at said medical device.
- [c17] 17.A method of controlling a medical device through voice commands, comprising:

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speaking a voice command into a microphone, said voice command identifying a function associated with one of a diagnostic and interventional procedure; decoding said voice command into a basic code; converting said basic code into a signal code representing the function identified by said voice command; transmitting said signal code to a receiver of a medical unit including the medical device; and directing said medical device to perform said function designated by said signal code.

[c18] 18.The method of claim 17 wherein said transmitting step includes wirelessly transmitting said signal code to the receiver of the medical unit.

[c19] 19.The method of claim 17 wherein said transmitting step includes transmitting said signal code through infrared signals to the receiver of the medical unit.

[c20] 20.The method of claim 17 wherein said transmitting step includes transmitting said signal code through radio frequency signals to the receiver of the medical unit.

[c21] 21.A system for operating an interventional fluoroscopic imaging apparatus through voice commands, comprising:
an interventional fluoroscopic imaging device for performing one of a medical diagnostic and interventional procedure;
an input unit for receiving a voice command identifying a function associated with one of a diagnostic and interventional procedure;
a voice decoder for decoding said voice command into a basic signal;
a protocol translator for converting said basic signal into a signal code representing said function identified by said voice command; and
a processing unit for directing said interventional fluoroscopic imaging apparatus to perform said function designated by said signal code.

[c22] 22.The system of claim 21 wherein said input unit is a microphone.

[c23] 23.The system of claim 21 further including:
a transmitter associated with said microphone, wherein said transmitter

09683669-020102

wirelessly transmits said signal code, and
a receiver provided at said medical device for receiving said signal code,
wherein said medical device and said microphone are remotely located from one
another.

[c24] 24.The system of claim 21 wherein said signal code is an infrared (IR) signal
code.

[c25] 25.The system of claim 21 wherein said signal code is a radio frequency (RF)
signal code.

[c26] 26A method of controlling an interventional fluoroscopic imaging device
through voice commands, comprising:
speaking a voice command into an input unit, said voice command identifying a
function associated with one of a diagnostic and interventional procedure;
decoding said voice command into a basic code;
converting said basic code into a signal code representing the function
identified by said voice command;
transmitting said signal code to a receiver of a medical unit including the
interventional fluoroscopic imaging device; and
directing the interventional fluoroscopic imaging device to perform said
function designated by said signal code.

[c27] 27.The method of claim 26 wherein said transmitting step includes wirelessly
transmitting said signal code to the receiver of the medical unit.

[c28] 28.The method of claim 26 wherein said transmitting step includes transmitting
said signal code through infrared signals to the receiver of the medical unit.

[c29] 29.The method of claim 26 wherein said transmitting step includes transmitting
said signal code through radio frequency signals to the receiver of the medical
unit.18.

[c30] 30.A system for operating an interventional medical device through voice
commands, comprising:
an interventional medical device for performing one of a medical diagnostic and

09683669-020102

interventional procedure; and

a processing unit for directing said medical device to perform a function based on a voice command, said processing unit including:

a voice decoder for decoding said voice command into a basic signal; and

a protocol translator for converting said basic signal into a signal code representing said function identified by said voice command, said processing unit directing said medical device to perform said function designated by said signal code.

[c31] 31.The system of claim 30 wherein said interventional medical device is a magnetic resonance imaging (MRI) device.

[c32] 32.The system of claim 30 wherein said interventional medical device is a computerized tomography imaging device.

[c33] 33.The system of claim 30 wherein said interventional medical device is a fluoroscopic imaging device.

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